

Patent claims**Sealing ring for a vehicle wheel**

- 5 1. A sealing ring (8) for a vehicle wheel having a
tubeless pneumatic tire (1) with two tire beads (6, 7)
which are formed on its radially inner side and by means of
which the tubeless pneumatic tire (1) is mounted on the
radial outer side of a multiple part rim (2), and having a
10 sealing ring which seals the pneumatic tire (2) radially
inward toward the rim (2), is arranged on the radial outer
side of the rim (2), extends over the circumference of the
rim (2) in the circumferential direction and extends
between the two tire beads of the pneumatic tire (1) in the
15 axial direction, characterized in that the sealing ring (8)
is configured with a central annular body (30) having a
cylindrical inner face for seating on the rim outer face
and is configured in each case with a concentric flexible
annular limb (31, 32) on both axial sides of the central
20 annular body (30), which limb (31, 32) extends obliquely
radially outward in the axial direction from the central
annular body (30) to the outside, and in that deformable
sealing elements are formed at that end of the limb (31,
32) which points away from the central annular body (30),
25 which sealing elements are configured on the radially
inwardly pointing surface of the annular limb (31, 32) so
as to extend over the circumference of the annular limb
(31, 32).
- 30 2. The sealing ring as claimed in the features of claim
1, deformable sealing elements being configured at that end
of the annular limb (31, 32) which points away from the
central annular body (30), which sealing elements are
configured radially outside the central annular body (30) on
35 the radially inwardly pointing surface of the annular limb

(31, 32) so as to extend over the circumference of the annular limb (31, 32).

5 3. The sealing ring as claimed in the features of claim 1 or 2, the deformable sealing elements being sealing lips (33, 34, 35, 36) which are oriented in the circumferential direction, in particular extend over the entire circumference of the sealing ring (8).

10 4. The sealing ring as claimed in the features of claim 1, 2 or 3, the sealing elements being a plurality of, in particular from three to six, sealing lips (33, 34, 35, 36) which are distributed in the radial direction, oriented in the circumferential direction and, in particular, extend
15 over the entire circumference of the sealing ring (8).

5. The sealing ring as claimed in the features of one or more of the preceding claims, the sealing lips (33, 34, 35, 36) extending away from the limb (31, 32) substantially
20 perpendicularly with respect to the surface of the limb (31, 32).

6. The sealing ring as claimed in the features of one or more of the preceding claims, means for reinforcing the
25 annular body being formed on the central annular body (30) between the annular limbs (31, 32).

7. The sealing ring as claimed in the features of claim 6, the means for reinforcement being one or more radial
30 elevations which is/are configured on the radial outer side of the annular body.

8. The sealing ring as claimed in the features of claim 7, a hollow space (38) being formed at least in one radial
35 elevation.

9. The sealing ring as claimed in the features of claim 6, 7 or 8, a reinforcing rib (37) which is oriented in the circumferential direction and, in particular, extends over the entire circumference of the annular body (30) being configured on the radial outer side of the central annular body (30) between the annular limbs (31, 32).

10. The sealing ring as claimed in the features of one or more of the preceding claims, the axial spacing c between the axial outer sides of the two limbs (31, 32) in a first radial position which corresponds to the radial position of the radially inner ends of the limbs (31, 32) being smaller than the axial bead spacing t_1 of the tire beads (6, 7) in the mounted operating state on the rim (2) in this first radial position, the axial spacing e between the axial outer sides of the two limbs (31, 32) in a second radial position which corresponds to the radial position of the radially outer ends of the limbs (31, 32) being greater than the axial bead spacing t_2 of the tire beads (6, 7) in the mounted operating state on the rim (2) in this second radial position, and the axial spacing between the axial outer sides of the two limbs (31, 32) in the region of the sealing elements being greater than the axial bead spacing t_1 of the tire beads (6, 7) in the mounted operating state on the rim (2) in the first radial position.

11. The sealing ring as claimed in the features of claim 10, the axial spacing between the axial outer sides of the two limbs (31, 32) in the region at least of the radially outer, in particular of all, sealing elements which are configured on the limbs (31, 32) being greater than the respective axial bead spacing of the tire beads (6, 7) in the mounted operating state on the rim (2) in this radial position.

12. The sealing ring as claimed in the features of claim 9
or 10, the difference of the axial spacing between the
axial outer sides of the two limbs (31, 32) minus the axial
5 bead spacing of the tire beads (6, 7) in the mounted
operating state on the rim (2) in the respectively assigned
radial position decreasing in the radial direction from one
sealing element to the next sealing element.